



DIVISION OF  
CORPORATION FINANCE

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

August 31, 2012

Via Facsimile

Thomas B. Miller  
Chief Financial Officer  
Ixia  
26601 West Agoura Road  
Calabasas, CA 91302

**Re: Ixia  
Form 10-K for the fiscal year ended December 31, 2011  
Filed March 5, 2012  
Form 8-K dated July 26, 2012  
Filed July 26, 2012  
File No. 000-31523**

Dear Mr. Miller:

We have reviewed your filings and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the fiscal year ended December 31, 2011

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 42

Critical Accounting Policies and Estimates, Income Taxes, page 44

1. We note the significance to your operating results of the foreign tax rate differential as disclosed on the income tax provision reconciliation on page 87. We also see the low effective tax rate on your foreign earnings from the tabular disclosure on page 86. In light of the increasingly significant impact of lower taxes on foreign earnings to your operating results, please consider describing the relationship between foreign pre-tax

income and the foreign effective tax rate in greater detail in future filings. It appears as though separately discussing the foreign effective income tax rate is important information material to an understanding of your results of operations. We refer you to Item 303(a)(3)(i) of Regulation S-K and Section III.B of SEC Release 33-8350. Tell us how you plan to address this comment.

Consolidated Financial Statements

Note 5. Concentrations, page 80

2. We note that you do not disclose quantitative information about your products and services. Please tell us how you considered the guidance in FASB ASC 280-10-50-40 requiring disclosure of revenues from external customers for each product and service (or each group of similar products and services) unless it is impracticable to do so. In that regard, we see from page 7 that the company provides both hardware and software products, including Chassis, Interface Cards, and Application Specific Test Suites. If it is impracticable to make these disclosures, you should disclose that fact.

Form 8-K dated July 26, 2012

Exhibit 99.1

3. It appears that you are presenting the non-GAAP information and the related reconciliation required by S-K Item 10(e) in the form of an “adjusted” income statement. Please tell us how your presentation considers the guidance set forth in Compliance and Disclosure Interpretation 102.10. Under the cited guidance, it is generally not appropriate to present a non-GAAP income statement for purposes of reconciling non-GAAP measures to the most directly comparable GAAP measures.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company’s disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

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In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Kristin Lochhead, Staff Accountant, at (202) 551-3664 or me at (202) 551-3676 if you have questions regarding comments on the financial statements and related matters. Please contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671 with any other questions.

Sincerely,

/s/ Brian Cascio

Brian Cascio  
Accounting Branch Chief